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#11

OCT 15 2001

1638

TECH CENTER 1600/2900

RAW SEQUENCE LISTING

DATE: 10/01/2001

PATENT APPLICATION: US/09/486,094

TIME: 15:18:47

Input Set : A:\09486094seqlist.txt

Output Set: N:\CRF3\10012001\I486094.raw

ENTERED

```

1 <110> APPLICANT: Freyssinet, Georges
2   Derosé, Richard
3   Hoffman, Jules
5 <120> TITLE OF INVENTION: GENE CODING FOR ANDROCTONINE, VECTOR
6   CONTAINING SAME AND TRANSFORMED DISEASE-RESISTANT PLANTS
7   OBTAINED
9 <130> FILE REFERENCE: A33002-PCT-USA 072667.0124
11 <140> CURRENT APPLICATION NUMBER: 09/486,094
12 <141> CURRENT FILING DATE: 2000-07-17
14 <150> PRIOR APPLICATION NUMBER: PCT/FR98/01814
15 <151> PRIOR FILING DATE: 1998-08-18
17 <150> PRIOR APPLICATION NUMBER: FRANCE 97/10632
18 <151> PRIOR FILING DATE: 1997-08-20
20 <160> NUMBER OF SEQ ID NOS: 12
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 110
26 <212> TYPE: DNA
27 <213> ORGANISM: Androctonus australis
29 <220> FEATURE:
30 <221> NAME/KEY: CDS
31 <222> LOCATION: (1)...(75)
32 <223> OTHER INFORMATION: Androctonine
34 <400> SEQUENCE: 1
35 agg tcc gtg tgc agg cag atc aag atc tgc agg agg agg ggt ggt tgc   48
36 Arg Ser Val Cys Arg Gln Ile Lys Ile Cys Arg Arg Arg Gly Gly Cys
37 1           5           10           15
39 tac tac aag tgc act aac agg cca tac tgagctcggc gaggcgaacg       95
40 Tyr Tyr Lys Cys Thr Asn Arg Pro Tyr
41           20           25
43 tgtcgacgga tccgg                                           110
45 <210> SEQ ID NO: 2
46 <211> LENGTH: 106
47 <212> TYPE: DNA
48 <213> ORGANISM: Tobacco
50 <220> FEATURE:
51 <221> NAME/KEY: CDS
52 <222> LOCATION: (12)...(101)
53 <223> OTHER INFORMATION: Tobacco PR-1a signal peptide
55 <400> SEQUENCE: 2
56 gcgctcgacgc c atg ggt ttc gtg ctt ttc tct cag ctt cca tct ttc ctt   50
57   Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu
58   1           5           10
60 ctt gtg tct act ctt ctt ctt ttc ctt gtg atc tct cac tct tgc cgt   98
61 Leu Val Ser Thr Leu Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg
62   15           20           25
64 gcc ggcga                                           106

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65 Ala
66 30
69 <210> SEQ ID NO: 3
70 <211> LENGTH: 211
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: Linker
77 <221> NAME/KEY: CDS
78 <222> LOCATION: (12)...(176)
79 <223> OTHER INFORMATION: Linker
81 <400> SEQUENCE: 3
82 gcgtcgacgc c atg ggt ttc gtg ctt ttc tct cag ctt cca tct ttc ctt 50
83           Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu
84           1           5           10
86 ctt gtg tct act ctt ctt ctt ttc ctt gtg atc tct cac tct tgc cgt 98
87 Leu Val Ser Thr Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg
88 15           20           25
90 gcc agg tcc gtg tgc agg cag atc aag atc tgc agg agg agg ggt ggt 146
91 Ala Arg Ser Val Cys Arg Gln Ile Lys Ile Cys Arg Arg Arg Gly Gly
92 30           35           40           45
94 tgc tac tac aag tgc act aac agg cca tac tgagctcggc gaggcgaacg 196
95 Cys Tyr Tyr Lys Cys Thr Asn Arg Pro Tyr
96           50           55
98 tgtcgacgga tccgg 211
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 75
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Synthetic oligonucleotide 1
108 <400> SEQUENCE: 4
109 gcgtcgacgc gatgggtttc gtgcttttct ctcagcttcc atctttcctt cttgtgtcta 60
110 ctctttcttct tttcc 75
112 <210> SEQ ID NO: 5
113 <211> LENGTH: 72
114 <212> TYPE: DNA
115 <213> ORGANISM: Artificial Sequence
117 <220> FEATURE:
118 <223> OTHER INFORMATION: Synthetic oligonucleotide 2
120 <400> SEQUENCE: 5
121 tcgccggcac ggcaagagta agagatcaca aggaaaagaa gaagagtaga cacaagaagg 60
122 aaagatggaa gc 72
124 <210> SEQ ID NO: 6
125 <211> LENGTH: 44
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Synthetic oligonucleotide 3

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132 <400> SEQUENCE: 6
133 aggtccgtgt gcaggcagat caagatctgc aggaggaggg gtgg 44
135 <210> SEQ ID NO: 7
136 <211> LENGTH: 97
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Synthetic oligonucleotide 4
143 <400> SEQUENCE: 7
144 ccggatccgt cgacacgttc gctcgcgga gctcagtatg gcctgttagt gcacttgtag 60
145 tagcaaccac ccctcctcct gcagatcttg atctgac 97
147 <210> SEQ ID NO: 8
148 <211> LENGTH: 85
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial Sequence
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Synthetic oligonucleotide 5
155 <400> SEQUENCE: 8
156 agggccccct aggggtttaa cggccagtc gccgaattc gagctcgga cccggggatc 60
157 ctctagagtc gacctgcagg catgc 85
159 <210> SEQ ID NO: 9
160 <211> LENGTH: 66
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Synthetic oligonucleotide 6
167 <400> SEQUENCE: 9
168 ccctgaacca ggctcgaggg cgcgcttaa ttaaagctt gcatgcctgc aggtcgactc 60
169 tagagg 66
171 <210> SEQ ID NO: 10
172 <211> LENGTH: 93
173 <212> TYPE: DNA
174 <213> ORGANISM: Artificial Sequence
176 <220> FEATURE:
177 <223> OTHER INFORMATION: Oligonucleotide primer
179 <400> SEQUENCE: 10
180 ccggccagtc aggcacact taattaagtt taaacgcggc cccggcgcg ctaggtgtgt 60
181 gctcgagggc ccaacctcag tacctggttc agg 93
183 <210> SEQ ID NO: 11
184 <211> LENGTH: 93
185 <212> TYPE: DNA
186 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <223> OTHER INFORMATION: Oligonucleotide primer
191 <400> SEQUENCE: 11
192 ccggcctgaa ccaggtactg aggttggggc ctcgagcaca cacctaggcg cgccggggcc 60
193 gcgtttaaac ttaattaagt gtggcctgac tgg 93
195 <210> SEQ ID NO: 12
196 <211> LENGTH: 19

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```

197 <212> TYPE: PRT
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Androctonine consensus sequence
203 <221> NAME/KEY: VARIANT
204 <222> LOCATION: (1)...(1)
205 <223> OTHER INFORMATION: Any amino acid
207 <221> NAME/KEY: VARIANT
208 <222> LOCATION: (3)...(7)
209 <223> OTHER INFORMATION: Any amino acid
211 <221> NAME/KEY: VARIANT
212 <222> LOCATION: (9)...(13)
213 <223> OTHER INFORMATION: Any amino acid
215 <221> NAME/KEY: VARIANT
216 <222> LOCATION: (15)...(17)
217 <223> OTHER INFORMATION: Any amino acid
219 <221> NAME/KEY: VARIANT
220 <222> LOCATION: (19)...(19)
221 <223> OTHER INFORMATION: Any amino acid
223 <400> SEQUENCE: 12
W--> 224 Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa
      225 1      5      10      15
W--> 226 Xaa Cys Xaa

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L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12

L:226 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12